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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/598,814	06/21/2000	Brian A. LaMacchia	MS#154745.1/40062.65US03	5403
22801	7590	03/15/2006	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			KIM, JUNG W	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/598,814	LAMACCHIA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jung W. Kim	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office action is in response to the amendment filed on January 30, 2006.
2. Claims 1-5 and 8-21 are pending.
3. Claims 1, 11-15, 17-21 are amended.
4. Claims 6 and 7 are canceled.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Response to Amendment***

6. The objection to claim 14 is withdrawn as the amendment to the claim overcomes the objection.
7. The amendment to claim 18 does not rectify all the 112/2<sup>nd</sup> paragraph issues to this claim: in particular, there is insufficient antecedent basis for the limitation "the first value" (line 2).
8. The 101 rejections to claims 1-5 and 8-21 are withdrawn as the amendments overcome the 101 rejections.

### ***Response to Arguments***

9. Applicant's arguments with respect to amended claims 1-5 and 8-21 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 18 recites the limitation "the first value" (line 2). There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

13. Claims 1-5, 8-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gong USPN 6,125,447 (hereinafter Gong) in view of Drews USPN 6,463,535 (hereinafter Drews).

14. As per claim 1, Gong discloses a method of associating a permission set with an action based on evidence characterized by different levels of trust, the method implemented at least in part by a computing device comprising:

- a. identifying a first condition for association with the permission set, wherein the first condition references a first element of evidence, wherein the first element of evidence is implicitly trusted and wherein the permission set is used to control operation of the code assembly during run-time; (col. 7:38-59; 10:27-56)

- b. determining whether the first condition is satisfied by the first element of evidence (10:27-56);
- c. associating the permission set with the code assembly, if the first condition is satisfied. (10:57-62)

15. Gong does not disclose identifying a second condition for associating with the permission set, wherein the second condition references a second element of evidence, wherein the second element of evidence is initially untrusted, determining whether the second element of evidence should be trusted based on the first condition; determining whether the second condition is satisfied by the second element of evidence and associating the permission set with the code assembly if both the first and second condition are satisfied. Drews discloses a method and system to determine whether code is authorized to be executed by a platform, wherein the downloaded code includes a digitally signed manifest, and wherein the signed manifest of the code uses a certificate chain associated to delegate the signing authority from one source to another. This enables a code signed by an untrusted source to be deemed trusted if the chain of certificate ultimately is signed by a trusted source. In particular, Drews discloses:

- d. identifying a first condition for association with a permission set (whether the code is permitted to be executed), wherein the first condition references a first element of evidence, wherein the first element of evidence is implicitly trusted (fig. 2, reference no. 280; col. 4:60-65);

- e. identifying a second condition for association with the permission set, wherein the second condition references a second element of evidence, wherein the second element of evidence is initially untrusted (col. 5:5-18, certificate[N],  $1 \leq N < K$ );
- f. determining whether the first condition is satisfied by the first element of evidence; determining whether the second element of evidence should be trusted based on the first condition; determining whether the second condition is satisfied by the second element of evidence (col. 5:5-18); and
- g. associating the permission set with the code assembly, if both the first condition and the second condition are satisfied (fig. 5B, especially reference no. 580).

16. Hence, it would be obvious to one of ordinary skill in the art at the time the invention was made to combine the system and method of verifying the authority of software using certificate chains as taught by Drews with the invention of Gong such that the invention of Gong further includes identifying a second condition for associating with the permission set, wherein the second condition references a second element of evidence, wherein the second element of evidence is initially untrusted, determining whether the second element of evidence should be trusted based on the first condition; determining whether the second condition is satisfied by the second element of evidence and associating the permission set with the code assembly if both the first and second condition are satisfied. One would be motivated to do so to enable delegation

of signing authorization from one source to another as taught by Drews. (5:5-6) The aforementioned cover the limitations of claim 1.

17. As per claims 2-5, the rejection of claim 1 under 35 U.S.C. 103(a) are incorporated herein. (supra) In addition, the operation of receiving at least a first and second condition comprises:

- a. receiving the first condition and the first element, and the second condition and the second element respectively, within a membership criterion; and
- b. receiving the first element and second element of evidence based on references in the membership criterion. (Gong, col. 7:60-8:37; 9:28-37; Drews, col. 2:57-3:7; 4:45-5:4)

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the system and method of verifying the authority of software using certificate chains as taught by Drews with the invention of Gong. One would be motivated to do so to enable delegation of signing authorization from one source to another as taught by Drews. (5:5-6) The aforementioned cover the limitations of claims 2-5.

18. As per claims 8 and 9, the rejection of claim 1 under 35 U.S.C. 103(a) is incorporated herein. (supra) In addition, the method further comprises

- h. generating a collection of code groups, each code group being associated with a membership criterion and a permission set, wherein the first condition and

the second condition are received in the membership criterion associated with one of the code groups (Gong, col. 9:9-18; Drews, col. 2:57-3:7); and

- i. determining whether the code assembly is a member of the code group, based on the membership criterion (Gong, 10:40-56); and
- j. the associating operation associates the permission set of the code group with the code assembly, if the code assembly is determined to be a member of the code group. (Gong, 10:57-62)

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the system and method of verifying the authority of software using certificate chains as taught by Drews with the invention of Gong. One would be motivated to do so to enable delegation of signing authorization from one source to another as taught by Drews. (5:5-6) The aforementioned cover the limitations of claims 8 and 9.

19. As per claim 10, the rejection of claim 1 under 35 U.S.C. 103(a) is incorporated herein. (supra) In addition, the method further comprising:

- k. receiving at least a third condition referencing a third element of evidence, wherein the third element is initially untrusted;
- l. determining whether the third element of evidence should be untrusted based on the second condition; and
- m. determining whether the third condition is satisfied by the third element of the evidence, wherein the associating operation comprises associating the permission set with the code assembly, if the first condition, the second



condition, and the third condition are satisfied (Drews, col. 4:60-5:19; the certificate chain comprises of k certificates, the certificate[k – 2] corresponds to the third element).

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the system and method of verifying the authority of software using certificate chains as taught by Drews with the invention of Gong. One would be motivated to do so to enable delegation of signing authorization from one source to another as taught by Drews. (5:5-6) The aforementioned cover the limitations of claim 10.

20. As per claims 11-16, the rejections of claims 1-5 and 8-10 under 35 U.S.C. 103(a) are incorporated herein. (supra) In addition, the code group is used to define a category of related code assemblies (Gong, col. 9:11-18), and the first element of evidence is independent of other evidence and conditions (the subject certificate is at the top of the certificate chain).

21. As per claims 17 and 19-21, the rejections of claims 1-5 and 8-10 under 35 USC 103(a) are incorporated herein. (supra) In addition, Gong discloses one or more first conditions are received (col. 9:11-13; fig. 4 reference, no. 406), and at least one first element of evidence includes initially untrusted evidence and at least one indication includes initially untrusted evidence (7:53-56; 10:52-56); furthermore, inherent in a computer process that generates an indication for satisfiability of a first condition, is an

indication for each first condition that is not satisfied. The aforementioned cover the limitations of claims 17 and 19-21.

***Claim Rejections - 35 USC § 103***

22. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gong in view of Drews, and further in view of Al-Salqan USPN 6,687,823 (hereinafter Al-Salqan).

23. As per claim 18, the rejection of claim 17 under 35 USC 103(a) is incorporated herein. (supra) Drews further discloses evaluating each signature on an untrusted certificate along the certificate chain to determine satisfiability of the conditions. However, Drews does not disclose associating values to the conditions, summing the values, then evaluating the sum against a threshold to determine satisfiability. Al-Salqan discloses collecting several authentication tests, wherein each test is assigned a weight, summing the collected weights of the tests passed by the user, and allowing the user access if the sum is greater than a certain threshold (fig. 2b; col. 2:7-24). Hence, it would be obvious to one of ordinary skill in the art to associate values to the conditions, summing the values, then evaluating the sum against a threshold to determine satisfiability since it is desirable to provide a priority or strength to each test for a more flexible means of determining satisfiability of a condition. (Al-Salqan, 1:50-63) The aforementioned cover the limitations of claim 18.

### ***Conclusion***

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Communications Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

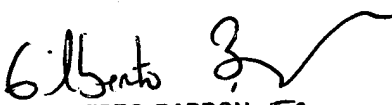
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



March 6, 2006

Jung W Kim  
Examiner  
Art Unit 2132



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